

Detailed engineering of AHWR is currently in progress and construction of this reactor can begin once the necessary site selection has been done and associated statutory and regulatory clearances are obtained.

As a part of the Indian strategy, large scale deployment of Thorium is to be introduced only at an optimal point during operation of Fast Breeder Reactors in the second stage. Thorium for power generation, will be used mainly in the third stage. During the next ten years, the power generated using thorium will reach a maximum of 300 MWe, provided AHWR, a technology demonstrator, gets operational during this period.

Uranium mine in Andhra Pradesh

2483. SHRI T.M. SELVAGANAPATHI: Will the PRIME MINISTER be pleased to state:

(a) whether the Department had discovered a huge reserve of Uranium in the State of Andhra Pradesh;

(b) if so, the details thereof;

(c) whether it took more than four years to discover this huge deposits of Uranium; and

(d) if so, the reasons for the long duration it took to discover this huge deposit of Uranium?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY):

(a) Yes, Sir.

(b) The Atomic Minerals Directorate for Exploration and Research (AMD), a constituent Unit of the Department of Atomic Energy, has so far established 83,538 tonnes of uranium resources (U_3O_8) in Andhra Pradesh. The details of the same are as given below.

Name of the Depot	Uranium Resources established (Tonnes U_3O_8)
Lambapur	1,450
Peddagattu	7,585
Tummalapalle - Rachakuntapalle	63,269
Koppunuru	2,761
Chitral	8,473
Sub -Total	83,538

[1 Tonne of U_3O_8 = 0.848 Tonnes of Uranium Metal]

(c) Yes, Sir.

(d) AMD has been carrying out exploration in Tumallapalle area since the year 1986. Initially, it was observed that the recovery was not economical by conventional acid leaching techniques due to carbonate rocks formation. However, further R&D efforts carried out in establishing effective leaching techniques enabled commencement of 2nd phase of exploration in the year 2007. The Uranium Corporation of India Ltd. (UCIL), a Public Sector Undertaking of this Department is currently undertaking construction of mine and mill at Tumallapalle for exploitation and processing of the uranium ore. The time taken for opening of the mine and setting up of the mineral processing plant is reasonable.

Safety assessment of Kaiga nuclear plant

2484. SHRI RAJEEV CHANDRASEKHAR: Will the PRIME MINISTER be pleased to state:

- (a) whether Government has undertaken any study on safety of nuclear plants in India;
- (b) if so, the details thereof;
- (c) the safety assessment of the Kaiga Plant in Karnataka; and
- (d) the measures that have been put in place by Government to ensure safety of this plant?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY):

(a) Yes, Sir.

(b) Soon after the Fukushima (Japan) incident, the Government directed a comprehensive review of safety of all the nuclear power reactors in the country. In line with this directive, Nuclear Power Corporation of India Limited (NPCIL) constituted four task forces for each of the technology in operation and two task forces for the two types of reactors under construction. These task forces have revisited the safety aspects of all the nuclear power plants and found that Indian nuclear power reactors are safe and have sufficient margins and features in the design to withstand extreme natural events. The reports of the task forces have been submitted and made public. The Atomic Energy Regulatory Board (AERB) and Bhabha Atomic Research Centre (BARC) have also constituted committees whose reports are expected in the near future.